**MAIZE-BASED AFRICARISING/NAFAKA SCALING MEETING**

**NAFAKA Compound, Morogoro (5TH MAY, 2015)**

**Enhancing partnership among Africa RISING, NAFAKA and TUBORESHE CHAKULA Programs for fast-tracking delivery and scaling of agricultural technologies in Tanzania**

The Maize-legume based Africa RISING/NAFAKA Scaling team consisting of partners such as IITA, CIMMYT, ARI- Hombolo, private partner (AMINATA), ICRAF and NAFAKA met in the NAFAKA Compound, Morogoro on the 5th of May, 2015 to deliberate on progress and way forward for the project implementation. Mr. Silvanus Mruma, Manager, NAFAKA, welcomed all participants to the meeting, and also introduced the Project Scaling Specialist, Dr. Haroon Sseguya, who most of the participants were meeting for the first time. Afterwards, Dr. Bright Jumbo briefed the team about the purpose and content of the meeting.

The team discussed various topics including update/status of established project demonstration fields; proposed upcoming activities such as – farmers field days, trainings to be conducted, review and planning meeting with all sub-contractors; Monitoring and Evaluation plans; field book and manual development, project expansion to Iringa and Mbeya in the next season; partnership with other initiatives operating in the same project sites we are operating; assignment of roles and responsibilities among the Africa RISING maize-based team, NAFAKA and TUBOCHA.

***A UPDATE ON CURRENT STATUS OF DEMOS ESTABLISHMENT IN PROJECT TARGET ZONES:***

Representatives of different components/project target zones within the maize-based group presented an update/status on established demos in their various zones. All demos are farmer-managed but researcher guided in a participatory approach:

***Babati:***

Five mother demos consisting of improved crop varieties, better management and improved water and soil conservation technologies (Improved crop varieties; maize, bean varieties, and better management- such as fertilizer, spacing, and soil water conservation) were well established in each of the five selected target villages in Babati in late January, 2015. However, there was a prolonged dry spell after planting, hence only two sites from Meru Agro established demos are suitable for farmer field days.

***Major Challenges***: Drought, climate variability

***Lesson learnt*:** explore the possibility of setting up improvised irrigation facilities

***Kongwa & Kiteto:***

In Kongwa and Kiteto, five demo plots (of each innovation technology) were also established in January 2015 in five selected villages in each district. Drought has been a major constraint in Kiteto and Kongwa. In Kiteto, only one demonstration site in Ngipa village is performing well and therefore a good candidate for the farmer field day. In Kongwa, all the groundnut technologies (varieties, organic and inorganic fertilizer, gypsum treatment combinations) demos performed well, except for the maize demo in which only three sites- Ndurugumi, Vihingo and Lesagi showed very good performance for maize technologies, compared to surrounding non-demo maize fields where most of the maize dried due to drought. Maize varieties planted in Kongwa district demo plots were TAN 222 and AMINATA 104. In the nearby fields, the maize was poor. Groundnut varieties used were Pendo and Mnanje. The major differences between the two groundnuts varieties will be seen at harvest. Chang’ombe is one of the sites that crop performance was not impressive at all in Kongwa.

***Major Challenges***: Drought, climate variability, fertilizer placement

***Lesson learnt*:**

* explore the possibility of setting up improvised irrigation facilities, do not place fertilizer very close to the seed especially during dry conditions and apply fertilizer only after rain or when there is enough moisture in soil
* incorporation of maize/groundnut intercropping, rather than the sole cropping alone

***Kilosa:***

The team established five demos of innovation technologies in five villages in Kilosa. The crops in the demonstrations include maize -NATA 104, TAN 600 and local varieties; and cowpea –Vuli 2-(from ARI Ilonga); treatment combinations were intercropping cowpea and maize, sole cropping, fertilizer treatment and soil water conservation treatment (tie ridges)

***Major Challenges***:

* Since NAFAKA is not operating in Kilosa, there was no NAFAKA agronomist in Kilosa, hence, the team initiated contacts with village and ward extension officers to work more closely with farmers and the team. However, the officers’ commitment is not adequate but we need to have them fully engaged as part of the scaling strategy. The team is re still exploring a possibility of involving researcher from Ilonga Agricultural Research Institute.

***Lesson learnt*:**

* Tie ridges should be at 1.5 to 2 meters and also in zigzag form
* Explore more ways to show farmers on how to add more value to the crop e.g. spacing maintenance and technology transfer to farmers through the participatory approach
* Link farmers to market
* Explore the storage and postharvest issues for cowpea

***Mvomero:***

Six sites were established in six villages; drought was a major challenge followed by Insects and weed infestation. Treatment combination and technologies were intercropping, fertilizer and varieties. Three of the established sites are doing very well, while one of the sites, Hoda needs replanting.

***Challenges:***

* Insects and weed infestation is a major challenge

**Lesson learnt:**

* Need to closely monitor and work with the farmers more closely, even when the conditions/weather is not convenient.

***AMINATA:***

* Aminata will produce and multiply most of the crop varieties that Africa RISING is scaling out; e.g. Bean varieties- Lyamungo, Selian 05,
* Seeds were planted in three locations- Kimamba, Kilosa districts (5 acres, Uyole Njano; 2 acres Selian; 4 acres soybean; maize NATA H 105, 3 acres)
* Hopefully the one ton bean target will be attained.

***Challenge***:

* drought, late rain, hence booster fertilizer was used
* Soybean population was not very good, mainly because of the misinterpreted plant density used; hence this will be corrected next season;
* Groundnut – Pendo and Mnanje seeds were not available early from the breeder in Mtwara; plan is in place to multiply next season;

***Lesson Learnt:***

* Plant performance and management should be well monitored
* More focus should be toward follow up and seriousness on groundnut multiplication
* Need to organize and buy clean groundnut seed from farmers and also use them for seed multiplication with guided regulations
* Link with other seed systems initiatives in target areas to provide enough seeds to reach the target number of farmers for the scaling out project



***Common Challenges:***

* Drought, climatic variability

***Overall lesson leant and to be incorporated next season:***

* Emphasize on the use of tie-ridges where necessary
* Technology complementarity, hence the ability to better integrate different innovative technology to achieve the required impact and reduce trade-offs
* Be meticulous in the placement of fertilizer and not too close to the planted seed; Also the soil should be moist or fertilizer applied after rain
* Be vigilant on the climatic variability, and prior planning for improvised irrigation if necessary
* Careful selection of terrain and best site selection to fit the technology being disseminated e.g. tie ridges are expected if you have some rains; however, the season this year has been abnormal because of the late rain and dry spell condition
* Need to understand the cropping season of the target zone, e.g. depending on where we are in Kongwa, the farmers normally have two season for groundnut, in November and January
* Since the project is scaling out technologies and better varieties to the farmers, the market preferences should be put into consideration, hence there is need to bring in a parallel initiatives that can do some study on the marketing channels of the crops
* There is need to incorporate farmers preferences into the kind of varieties we introduce to farmers; Hence the breeders should help to map out the origin of different varieties to enable us link the origin with the target zone where we are scaling out the technology variety and management to
* NAFAKA should share the list of crop varieties in stock to be promoted to confirm that they have been officially release and has evidence based research to be scaled-out
* Need to test some more drought tolerant materials, though we already have the QPM to have alternatives for different locations. e.g. at least two hybrids and QPM
* How much input does the scientific impact/technology has on the parallel necessity such as market in terms of preferences, quality, etc.

***G*eneral comment:**

* Next season, the bean will be demonstrated on both low and highland agroecosystems,
* Need to link up and sensitize the private companies to produce and multiply the crop varieties we are scaling out.
* Develop a proposal with NAFAKA to be able to push most of the ideas from lesson learnt from this year scaling out; e.g. especially the out-performed technologies; market channeling, purification of the local landraces, etc.

B. **FARMER FIELD/STAKEHOLDER DELIBERATION DAY:**

It was noted that NAFAKA has organized field days for locations where they work. The dates should be shared such that we combine the field day activities where this is feasible

***Babati***: 2 Sites from Meru Agro Demos which performed well, and two sites from Selian which did not perform well will be used in Babati on the farmer’s field day. We should not consider only the good areas, we should get lessons from what did not work well. Hence, purpose is to show effect of constraints on establishment (climate change, fertilizer placement, and terrain/topography). Date is yet to be communicated

***Kiteto:*** Demo plot located at Ngipa village will be used. Tentative date of field day: 26th and 27th May.

***Kongwa:*** Ndurugumi site belonging to farmer Yohanna will be used for the field day; Tentative date of field day: 19th and 20th May

**Kilosa**: Most of the sites were well established. Date to be communicated after NAFAKA has shared dates for other locations (NAFAKA does not operate in Kilosa but we need to agree on the date after getting information for the other sites).

**Mvome**r**o:** Farmers field day will be communicated

**Invitees:** farmers, Lead farmers; stakeholders along the value chain such as marketers, NGO, parallel project initiatives, government officers, agro-input dealers, DAICO, VBAAs, national television and local radio etc.

1. **TRAINING ACTIVITIES**

* Team will conduct training on good agricultural practices (GAP) and soil and water conservation techniques to the farmers.
* More training on tool development and data collection will be done to the NAFAKA agronomists

1. **MONITORING AND EVALUATION**

Team will develop a monitoring and evaluation tool to track indicators and indicators targets in the project implementation. Haroon to develop the scaling plan and Silvanus will develop the M&E plan which will be incorporated into the M&E framework which is being finalized by Haroon. The team suggested the M&E procedures as indicated below:

* Necessary to track and aligned the project target number to reach with the project implementation status and way forward;

Need the GPS data from all sites. NAFAKA will provide the GPS coordinates for all sites in the locations where they operate.

* Indicators and targets: The scaling project is finalizing indicators which will be shared with the team members to report on. NAFAKA will share data collection forms for output indicators which will be adapted for project activities.
* Harvesting and Yield Data Collection and Analysis: Team members have in the past developed tools for yield data collection. These will be sent to Haroon for harmonization and sharing with team members. A reminder will be sent to members by May 15, 2015. NAFAKA agronomists will also be trained on how to use the data collection
* Joint field visits: These will be organized to facilitate learning.

1. **DEVELOPMENT OF FIELD MANUAL/HANDBOOK**

Handbook/Manual, posters and factsheet (publicity materials) will be produced by the team on the below:

**Different Crops**: Maize, Soybean, Beans, Groundnut, Cowpea;

Different Technologies:

-**Intercropping patterns**- Maize/groundnut; Maize/cowpea; Maize/beans

-**Fertilization**

-**Soil Water Conservation**

**Lead Organization:**

-Maize- : Jumbo, Kimaro, Kizito, Swai & Zubeda

-Beans, Groundnut, Cowpea & Soybean: Baijukya, Uzokwe & Swai

1. **PARTNERSHIPS/SCALING- LEVERAGING WITH OTHER INITIATIVES**

The team agreed on the need for the project to link up and interact, if possible work together with parallel projects with common goal/interests.

1. **EXPANSION TO IRINGA AND MBEYA- ATTENTION POINTS**

The project, especially maize and rice component will extend to Iringa and Mbeya during the next season. This will be discussed more during the upcoming review and planning meeting from 2nd to 3rd July, 2015 in Morogoro.

1. **Roles and Responsibilities – NAFAKA, TUBOCHA & Africa Rising**

NAFAKA re-iterated its support, in terms of the agronomy personnel on ground in various target zones, and has asked the team to report any inconsistencies if observed.

**I. MASTER PLAN AND STANDARDIZATION OF PROTOCOLS**

* 1. Organize the already available up scaling master plan for localized protocols for demo plots and tools to capture the data collected on these sites; farmers perceptions; researchers feedback (Frederick Baijukya and Fred Kizito)
* 2. Need to organize and capture the already available scaling and agronomy guideline to capture all the indicators and also the dissemination market plan- timeline 15th May (Frederick Baijukya and Fred Kizito)
* 3. Make a table of content for M & E guideline to capture all the indicators for evaluation in terms of project implementation performance; We should add the indicators, target indicators and tools (how to collect the data) to the already established annual work plan (Haroon Sseguya)
* 4. Organize the data collection plan (All)

1. **FOLLOW UP/FURTHER ACTION TO BE TAKEN:**

* Silvanus to circulate a detailed agenda of the proposed upcoming review and planning meeting with all sub-contractors to take place at the NAFAKA compound and scheduled tentatively for the 2nd and 3rd of July, for the inputs of the Maize based group.
* Haroon and Silvanus to prepare and send comprehensive official letters (including programme) of invitation to all sub-contractors that will be coming for the proposed review and planning meeting.

**LIST OF PARTICIPANTS:**

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